

DP-308980

ADAPTIVE CONTROL OF A CAM PHASE ADJUSTMENT MECHANISM

ABSTRACT OF THE DISCLOSURE

A closed-loop control for a cam phase adjustment mechanism includes gain terms that are adaptively adjusted to optimize the rate of response of the control to changes in the desired cam phase. The rate of response of the cam
5 phase adjustment mechanism is sampled under specified operating conditions or during certain repeated engine events that involve a change in the desired cam phase, and the deviation of the measured rate of response from the nominal rate of response is determined and used to adjust the closed-loop control gains for restoring the nominal response.

10